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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/863,181	05/23/2001	William A. Cox	CWL-101-A	9646

7590 03/28/2005

Andrew R. Baslie  
Young & Baslie, P.C.  
Suite 624  
3001 West Big Beaver Road  
Troy, MI 48084

EXAMINER
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PETERSON, KENNETH E

ART UNIT	PAPER NUMBER
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3724

DATE MAILED: 03/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

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<b>Office Action Summary</b>	Application No.	Applicant(s)	
	09/863,181	COX, WILLIAM A.	
	Examiner	Art Unit	
	Kenneth E Peterson	3724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 May 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-17,37,39,40 and 46-57 is/are pending in the application.
- 4a) Of the above claim(s) 3-12,37,39,40,46 and 48 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,13-17,47 and 49-57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date: _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date: _____  | 6) <input type="checkbox"/> Other: _____                                    |

1. Claims 3-12,37,39,40,46 and 48 are withdrawn from further consideration as being nonelected. Applicant timely traversed the election requirement in the reply filed on 12 May 04.

The traversal is on the grounds that the 7 independent claims are materially distinct from one another. Applicant proceeds to point out the following features;

The raised radial flanges,

Individual rollers,

Claims with no dies,

Die diameter compared to column width,

Interchangeability between high and low speed applications,

Interchangeability between die bearings and journal bearings.

Applicant has 6 features he feels are important enough to mention, and is given 16 claims to claim them in. As seen in the claims elected, 16 is a sufficient number to represent these features without undue multiplicity. If Applicant wishes more independent claims and less dependent claims, he may add independent claims in response hereto, so long as he cancels a corresponding number of dependent claims such that the total number of active claims is 16 or less.

Applicant argues that Examiner has given no examples of there being "shades of meanings" and "possibility of confusion" amongst the claims. While there are many different points Examiner could raise, Examiner will limit his examples to two of the "features" set forth by Applicant above. One "feature", the interchangeability between high and low speed applications, is the same feature as the interchangeability between

die bearings and journal bearings. By claiming the same feature in slightly different ways, there is a doubling of the chance of misinterpretation and there is also some confusion about whether there is any difference of scope between the two "features".

Further adding to the confusion are the myriad new matter problems, 112, 2<sup>nd</sup> paragraph problems and objectionable claim language. These problems would be multiplied without the multiplicity rejection, to the point where an Examiner, the Attorney or the Public would likely make an error of some type due to confusion.

The multiplicity rejection is still deemed proper and is therefore made FINAL.

2. The amendment filed 12 May 04 is objected to under 35 U.S.C. 132 because it introduces new matter into the disclosure. 35 U.S.C. 132 states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows:

In claims 1, 13 and to a lesser extent 55, the first die support provides "exclusive" support for the first die in all three directions. No support can be found for this in the specification as originally filed. In the horizontally transverse direction and the longitudinal direction, the upper die plays a part in preventing motion.

In claim 54, the journals extending from *each* end of the dies lacks support from the original disclosure.

Applicant is required to cancel the new matter in the reply to this Office Action.

3. Claims 1,13-17 and 54 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention, as set forth above.

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4. The disclosure is objected to because of the following informalities:

The specification fails to identify the different embodiments. For example, figure 1 shows the bearing rollers 44 engaging the outer periphery of the radial flanges. Figure 2 shows the bearing rollers 44 engaging a side face of the radial flanges. The specification paradoxically states that figure 2 is a side view of figure 1.

Other figures and portions of the specification suffer from similar problems.

Alternately viewed, this could be considered an objection to the drawings for misshowing the device of the specification.

Appropriate correction is required.

5. Claims 47,49-57 are objected to because of the following informalities:

All of these claims are titled a "modular die frame" that is "for use with a first rotary die". However, the body of the claims positively recite the first rotary die (e.g. line 12, claim 47, line 13, claim 55). Since Examiner must now give full weight to the first rotary die, the invention is no longer just a "modular die frame for use with a first rotary die", but instead is a "rotary die apparatus having a first rotary die".

Appropriate correction is required.

6. Claims 1,13-17,47,49-57 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims 1, 13 and to a lesser extent 55, the first die support provides “exclusive” support for the first die in all three directions. However, the specification reveals that In the horizontally transverse direction and the longitudinal direction, the upper die plays a part in preventing motion. Thus it is not clear what weight should be given to the term “exclusive”. Also in claims 1 and 13, it is not clear how the bearings 44 give “support” in horizontal directions. The term “support” means to bear the weight against gravity, which generally does not occur in the horizontal direction. Because of this, it is not clear what weight to give this horizontal supporting.

Claims 47 and 53 recite that the “die supports are adaptable for high or low speeds”. There is no way that Examiners or Attorneys could ever come to an agreement about what would or would not be infringing on this phrase, especially since “adaptable” is open-ended and “high” and “low” are relative terminology.

Claims 47 and 55 are perhaps perceivable as claiming more than one type of die support alternately within one claim. On the other hand, it could be argued that only one type of die support is claimed, but that it is swappable for another unclaimed die support. If Applicant would like to claim both types of die supports, but not for use at the

same time, Applicant should draft a "kit claim". Alternately, if Applicant intended to claim both for use at the same time, then both should be more positively recited.

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

8. Claims 1,13,16,17,47,49 and 53 are rejected under 35 U.S.C. 102(b) as being anticipated by Gautier '078, who shows a rotary die apparatus having all of the recited limitations including 4 columns (31), a base (12), a cap, a cross member (15), a first die support module having spaced bearings (13) fixed directly to the base (12A), a second die support module having spaced bearings (16), and a pressure device (21,22).

Just like Applicant's device, the bearings (13) provide all of the support in the vertical direction and provide some stability in both horizontal directions.

In regards to claims 47 and 53, the die supports are "adaptable" for high or low speed rotary die applications, since they are capable of performing either.

In regards to claim 47, the modular die supports are deemed to be "interchangeable" since such devices are inherently built with maintenance in mind. Also, it is difficult to imagine why or how the bearings 44 of the die support would be permanently attached. Thus the die supports could be "interchanged" for duplicates once they wear out.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1,13,16,17,47,49 and 53 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gautier '078.

If it is interpreted that Gautier's die supports are not "interchangeable" or "modules", then Examiner takes Official Notice that it is old and well known for dies supports to be interchangeable modules. An example of this is the patent to Belongia '461, who shows die support modules (25) that are interchangeable (note removable bolts in figure 3). It would have been obvious to one of ordinary skill in the art to have modified Gautier by making his die supports be interchangeable modules, as is well known and taught by Belongia, in order to be able to replace them when they wear out.

11. Claims 1,13-17,47,49-53,55 and 56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gautier '078, as modified above or not.

Gautier shows a die cutting apparatus with all of the recited limitations except for a set of radial flanges that engage the bearings (13). However, Examiner takes Official Notice that it is old and well known for the bearing-die relationship to employ radial flanges to enhance longitudinal stability. An example of this is the patent to Keston '116, who shows radial flanges (88) on the bearing to prevent longitudinal motion of the rotary die. Of course, it is a simple and obvious reversal of parts to have the radial



flange on the die instead of the bearing. It would have been obvious to one of ordinary skill in the art to have modified Gautier by adding a radial flange to the dies that could laterally engage the bearings (13,16) and the opposing die, as is generically known and made obvious by Keston, in order to enhance longitudinal stability of the dies and thus make more accurate cuts in the workpiece.

In regards to claim 55, Gautier shows a bearings (4,3) that engages the journals (9,10), but does not state that these are "cylindrical roller bearings". Examiner takes Official Notice, and Applicant will agree, that such is well known. It would have been obvious to one of ordinary skill in the art to have made these bearings be cylindrical roller bearings, since that is the type of bearing that is most common in this type of device.

12. Claims 54 and 57 may be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 1<sup>st</sup> and 2<sup>nd</sup> paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

13. Applicant's arguments have been fully considered but they are not persuasive.

Applicant argues the rejection under 35 USC 112, but this is moot since the rejected claims are now non-elected.

Applicant argues against the 102b rejection by Gautier, but Applicant's new "exclusive support" language is too indefinite to distinguish over Gautier (see above 112, 2<sup>nd</sup> paragraph rejection).

Applicants amendments have overcome the rejection employing Bell '247, but the new reference to Keston "116 makes obvious the newly added language.

Applicant notes that claims 1,8,9,10,13,16,17 and 46 should not have been included in the 103 rejection. However, the combination of Gautier and Bell read on these claims, and thus their inclusion was appropriate.

Applicant argues against the rejections employing Bernal (reference AS) and Okuda, but these rejections have not been applied in the current action.

14. Made of record but not relied on is a patent to Aichele showing a pertinent die support system.

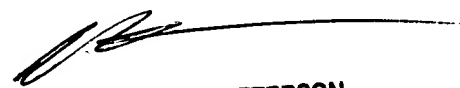
15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ken Peterson at 571-272-4512, on Monday-Thursday, 7AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Allan Shoap, can be reached at 571-272-4514. In lieu of mailing, it is encouraged that papers be faxed to 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. For more information about the PAIR system, see <http://pair-direct.uspto.gov> or call the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

kp

March 22, 2005



KENNETH E. PETERSON  
PRIMARY EXAMINER